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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,757	08/24/2001	Yandapalli Durga Prasad	34603PCTUSAA; 066123.0108	4097

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NEW YORK, NY 10112

EXAMINER

WARE, DEBORAH K

ART UNIT	PAPER NUMBER
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1651

DATE MAILED: 04/09/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/938,757

Applicant(s)  
Prasad

Examiner  
Deborah Ware

Art Unit  
1651



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jan 16, 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above, claim(s) 7-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5 6) ☐ Other:

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Claims 1-23 are pending.

1. Applicant's election with traverse of Group I in Paper No. 7 is acknowledged. The traversal is on the ground(s) that there is no serious burden placed on the examiner. This is not found persuasive because the method steps required by the method are not required for the product claims drawn to an agropolymer and thus, a different process may be employed of which would require different process steps. Therefore, a reference found to read on the product would not necessarily read on the process claims of the other Groups. One way distinctness is well defined and two way distinctness between Groups II-III is also well defined as each process requires different process steps.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 7-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention(s), there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 7. However, Applicant's reference to rejoinder of claims in accordance with the MPEP 821.04 is noted for the record.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 4-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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② Claims 4-6 are rendered vague and indefinite for "said plant parts" because the term lacks antecedent basis. Are the plant parts referred to in claim 4 intended to have been already micronized? If so, it is suggested to insert --micronized-- before "plant parts".

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 93/12877 in view of Vega (A) and Kelly (B).

Claims are drawn to an agropolymer comprising silica matrix or carbohydrate obtained from a plant such as Triticum.

WO patent teaches polymers that can bind metals which is comprised of carbohydrate or matrix. Note page 45 wherein the polymers are derived from natural products.

Vega teach crop products from seed hulls wherein the products of interest are carbohydrates obtained from rice and oat hulls. Note col. 1, lines 20-30 and col. 2, lines 10-20.

Kelly teach Vigna mungo and Vigna radiata at col. 7, lines 57 and 58. The reference further teaches that the plant parts can be treated using blending, milling, grinding, drying etc., in order to provide for plant parts of micron size. Note col. 9, lines 1-10.

Claims differ mainly from WO patent in that the specific crops and plant parts therefrom, are not disclosed and specific treatments for manipulating the crop plant parts are not disclosed.

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It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to obtain the polymers of WO patent using the natural crop plant sources of Vega and Kelly in order to provide for an agropolymer. Plants are comprised of carbohydrates such as cellulose which has a lattice matrix. The specific crop plants are disclosed by Kelly and are well known to the ordinary artisan. Many plant crops may be used as disclosed by Vega. Further, Vega teaches that the carbohydrates of the crop plant parts provide for metal binding reactive sites, since carbohydrates are disclosed to be useful as a metal complexing agent. Note col. 1, lines 45-50. Clearly one of skill in the art would have been motivated to select for crop plant parts. The plants of *Vigna radiata* and *Vigna mungo* are well known as taught by Kelly. Thus, to select for these plants or a rice plant part as disclosed by Vega is clearly within the skill of an ordinary artisan. By selecting for plant parts the matrix obtained therefrom would have been expected to comprise metal binding reactive sites. Also to provide for plant parts in micron size or to micronize plant parts is clearly within the skill of an ordinary artisan.

Micronizing by treating with chemicals and drying are well known. Further to observe organometallic bonds via infrared spectroscopy is also within the skill of an ordinary artisan. To select for specific wave number ranges using spectroscopy is an obvious modification of the prior art. Also various treatments for revealing the organometallic bonds is clearly within the level of skill of the practitioner. The claims are suggested by the cited prior art and deemed *prima facie* obvious.

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All claims fail to be patentably distinguishable over the state of the art discussed above and cited on the enclosed PTO-892 and/or PTO-1449. Therefore, the claims are properly rejected.

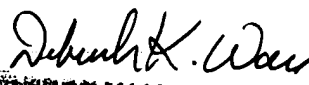
The remaining references listed on the enclosed PTO-892 and/or PTO-1449 are cited to further show the state of the art.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah K. Ware whose telephone number is (703) 308-4245. The examiner can normally be reached on Mondays to Fridays from 9:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn, can be reached on (703) 308-4743. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3592.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

  
**DEBORAH K. WARE**  
**PATENT EXAMINER**

Deborah K. Ware

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April 5, 2003